

**IN THE UNITED STATES DISTRICT COURT FOR THE
NORTHERN DISTRICT OF ILLINOIS**

Cascades Branding Innovation LLC,

Plaintiff,

v.

Aldi, Inc.

Defendant.

No. 21 CV 06563

Honorable Nancy L. Maldonado

MEMORANDUM OPINION AND ORDER

Plaintiff Cascades Branding Innovation LLC (“Cascades”) brings this lawsuit against Aldi, Inc. (“Aldi”) alleging infringement of three patents held by Cascades: U.S. Patent Nos. 7,768,395 (the “395 Patent”), 8,106,766 (the “766 Patent”), and 8,405,504 (the “504 Patent”) (together the “Asserted Patents”). (Dkt. 1.)¹ The Asserted Patents are all entitled “Brand Mapping,” and purportedly relate to improvements in mobile devices to allow them to locate branded products and services in the vicinity of the device, in order to direct the device user to nearby locations where those products and services may be available for purchase. Cascades alleges that certain aspects of the “Aldi USA” application—Aldi’s mobile application for smart phones that enables users to locate Aldi stores in their vicinity— infringe the Asserted Patents.

Aldi has moved to dismiss Cascades’ patent infringement claims pursuant to Federal Rule of Civil Procedure 12(b)(6). Aldi contends that Cascades’ patent claims seek to patent unpatentable subject matter under the Patent Act, 35 U.S.C. § 101, because they are based on abstract ideas and lack an inventive concept, which is required to make them patent-eligible. For the reasons set forth

¹ In citations to the docket, page numbers are taken from the CM/ECF headers.

below, the Court grants Aldi's motion to dismiss, and dismisses Cascades' Complaint with prejudice.

Background²

Plaintiff Cascades is an Illinois limited liability company with its principal place of business in Chicago, Illinois. (Dkt. 1, "Compl." ¶ 1.) Cascades is the exclusive licensee and holder of all substantial rights in the Asserted Patents, which were originally filed by Dr. Steven K. Gold, a medical doctor, entrepreneur, and inventor. (*Id.* ¶¶ 1, 5.) Dr. Gold first filed for the Asserted Patents in June 2007. (*Id.* ¶ 5.) The '395 Patent ultimately issued on August 3, 2010, the '766 Patent issued on January 31, 2012, and the '504 Patent issued on March 26, 2013. (*Id.*)³ Defendant Aldi is an Illinois corporation with its principal place of business in Batavia, Illinois. (*Id.* ¶ 2.). The Court will detail Cascades' patent claims below, as well as Aldi's alleged infringement of those claims.

A. Cascades' patent claims.

The Asserted Patents are all entitled "Brand Mapping," and contain dozens of claims related to purported improvements in the mapping capabilities of certain physical devices to allow the user of those devices to locate branded products and services in their vicinity, without the user having to input their location. (*See, e.g.*, Dkt. 11-1 at 1.) Claim 1 of the '395 Patent, which the parties agree is exemplary of the claims at issue, contains five elements:

(A) displaying, using a device, a first image associated with a first brand;

² The Court takes the factual background from the well-pled allegations in the Complaint (Dkt. 1) and assumes the allegations to be true for the purposes of the instant motion. *See, e.g., Anicich v. Home Depot U.S.A., Inc.*, 852 F.3d 643, 648 (7th Cir. 2017).

³ Aldi attaches the patent forms for the Asserted Patents as exhibits to its motion to dismiss. (*See* Dkt. 11-1, the '395 Patent; Dkt. 11-2, the '766 Patent; Dkt. 11-3, the '504 Patent.). Cascades does not dispute the authenticity of the documents, and because the three patents are discussed in the Complaint and are central to Cascades' claims, the Court may consider the patent forms without converting Aldi's motion into one for summary judgment. *Wright v. Associated Ins. Cos., Inc.*, 29 F.3d 1244, 1248 (7th Cir. 1994) ("documents attached to a motion to dismiss are considered part of the pleadings if they are referred to in the plaintiff's complaint and are central to his claim") (citations omitted).

- (B) receiving, from a user of the device, an indication of a selection by the user of the first image;
- (C) identifying a first location of the device independently of any location-specifying input provided by the user to the device;
- (D) identifying a first brand access site at which a first branded entity having the first brand is accessible; and
- (E) providing to the user, using the device, a first map image which describes a first geographic area derived from the first location of the device and which includes a first indication of the first brand access site, wherein the first indication of the first brand access site comprises a second image associated with the first brand, located at a position in the first map image corresponding to the first brand access site.

(Dkt. 11-1 at 14.) Claim 1 of the '766 Patent and Claim 1 of the '504 Patent are substantially the same; Claim 1 of the '766 Patent merely adds to paragraph (E) that the device will display a second indication of the first brand access site, and Claim 1 of the '504 Patent adds a few paragraphs related to wireless communication capabilities. (Dkt. 11-2 at 14; Dkt. 11-3 at 14.)

To summarize the claim in more concrete terms based on the detailed description provided in the patent forms: under all the Asserted Patents, the user of a physical electronic device, like a smart phone, would be presented with images associated with different brands of products or services, such as the Coca-Cola logo or the Apple logo. The user selects a particular brand image using the device's input method, whether it is via touch screen or keypad or some other method. After the image is selected, the device automatically identifies the brand's location without the user having to make any additional input—for example a smart phone might use its internal GPS—and displays a map of the geographic area surrounding the device location. The map is populated with indicators showing nearby “brand access sites” where the selected brand of products can be purchased. In other words, a user could select or click on the Coca-Cola logo on their device, for example, and be presented with a map of all stores and businesses in the

surrounding geographic area that sell Coca-Cola products or services, without having to make any other inputs indicating the device location. (*See generally* Dkt. 11-1 at 8–14) (providing a detailed description of the asserted '395 Patent).

The Asserted Patents describe the above method as an improvement on the prior conventional computer-based systems for displaying maps with information to users. According to the Asserted Patents, those conventional systems typically worked in one of three ways: (1) the user would specify their location, for example by inputting their zip code or address, which would then generate a map of the location, after which the user could search for a particular business or service; (2) the user receives a map with their location automatically, and then inputs a particular business or service; or (3) the user first searches for a business, and then receives a map of the business locations, after which the user can enter in more specified location information. (*See* Dkt. 11-1 at 7; Dkt. 11-2 at 7; Dkt. 11-3 at 7.) The Asserted Patents claim that their method—where a user selects an image of a brand and is automatically presented with a map of those brands in the area—improves upon these prior arts by allowing users to search for locations where the products or services of a brand may be available for purchase with minimal effort, because the user does not need to input any location identifying information. (*See, e.g.*, Dkt. 11-1 at 13.)

B. Aldi's alleged infringement

Aldi provides for customers an Aldi USA application, which is available for use on iPhones and other Apple devices. (Dkt. 1 ¶¶ 2, 15.) Cascades alleges that Aldi infringed a number of the claims across the three Asserted Patents through its Aldi USA application, including Claim 1 of each of the Asserted Patents, which Cascades asserts is exemplary of all of Aldi's infringement. (*Id.* ¶¶ 20, 32, 45). In general, the Aldi USA application enables users to select an Aldi-branded icon to locate ALDI-branded store locations in their vicinity on a map, without the

users having to manually enter a device location. (*Id.* ¶ 2.) Specifically, when users download the Aldi USA application to their device, such as an iPhone, it causes the device to display an image of the Aldi logo on the device’s screen. (*Id.* ¶ 21.) Users can then select the Aldi logo using the device’s input selection method, such as touching the iPhone screen. (*Id.* ¶ 23.) The device that is loaded with the Aldi USA application then identifies its location without the need for further input from the user, and proceeds to create a map image showing a geographic area around the devices location. (*Id.* ¶ 25.) This map is then populated with images associated with the Aldi brand indicating the physical location of Aldi stores. (*Id.* ¶¶ 27, 29.).

Cascades maintains that the Aldi USA application directly infringes the Asserted Patents, and that Aldi has further induced others to engage in direct infringement by supplying the application to customers, and encouraging their use of it, despite its knowledge that the use of the application constitutes infringement. (*See id.* ¶¶ 65–66.). Cascades therefore initiated this patent-infringement action asserting three counts against Aldi, one for alleged infringement of each of the Asserted Patents. (*See generally id.* at pp. 5–15) Cascades seeks an award of damages and a permanent injunction prohibiting further infringing conduct. (*Id.* at 16.)

Legal Standards

A. Rule 12(b)(6) Motion to Dismiss Generally

A motion to dismiss under Rule 12(b)(6) challenges the sufficiency of the complaint, not its merits. Fed. R. Civ. P. 12(b)(6); *Gibson v. City of Chicago*, 910 F.2d 1510, 1520 (7th Cir. 1990). In considering a Rule 12(b)(6) motion, the Court accepts as true all well-pleaded facts in the plaintiff’s complaint and draws all reasonable inferences from those facts in the plaintiff’s favor. *Kubiak v. City of Chicago*, 810 F.3d 476, 480–81 (7th Cir. 2016). The Court need not, however, accept conclusory allegations, or allegations that contain only legal conclusions. *See, e.g., Dix v.*

Edelman Fin. Servs., LLC, 978 F.3d 507, 513 (7th Cir. 2020) (citations omitted). To survive a Rule 12(b)(6) motion, the complaint must assert a facially plausible claim and provide fair notice to the defendant of the claim’s basis. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009); *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007); *Adams v. City of Indianapolis*, 742 F.3d 720, 728–29 (7th Cir. 2014). A claim is facially plausible “when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Iqbal*, 556 U.S. at 678.

B. Patentable Subject Matter

Section 101 of the Patent Act sets forth the threshold definition of patent-eligible subject matter, providing that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C.A. § 101. Section 101 does not allow for patents of every discovery, however, and the Supreme Court has long held that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.* 569 U.S. 576, 589 (2013)). These exceptions are based on the principle that “[p]henomena of nature, though just discovered, mental processes, and abstract intellectual concepts . . . are the basic tools of scientific and technological work.” *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). To allow petitioners to patent such “basic tools,” would be to preempt their use in all fields, thereby stifling scientific and technological development. *See, e.g., Bilski v. Kappos*, 561 U.S. 593, 612 (2010).

In order to guide courts in their analysis of patentable subject-matter, the Supreme Court has developed a two-part test for patentability, commonly referred to as the *Alice* or *Alice/Mayo*

test, after the cases in which the Court set forth the framework. *See Alice*, 573 U.S. at 217 (citing *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 76–77 (2012)). First, the reviewing court must “determine whether the claims at issue are directed to a patent-ineligible concept.” *Id.* at 218. In other words, are the patents directed at laws of nature, natural phenomenon, or abstract ideas? If the answer at that first step is yes, the reviewing court moves to the second step and determines “whether the remaining elements, either in isolation or combination with the non-patent-ineligible elements, are sufficient to ‘transform the nature of the claim into a patent-eligible application.’” *Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1366–67 (Fed. Cir. 2015) (quoting *Alice*, 573 U.S. at 217). This inquiry at the second step essentially asks whether the claim contains an “inventive concept sufficient to bring the abstract idea into the realm of patentability.” *In re TLI Commc'ns. LLC Pat. Litig.*, 823 F.3d 607, 613 (Fed. Cir. 2018). “Meeting the ‘inventive concept’ requirement is no small feat, as a claim ‘cannot rely on the novelty of . . . discovery for the inventive concept necessary for patent eligibility.’” *Atos, LLC v. Allstate Ins. Co.*, No. 20-CV-06224, 2021 WL 6063963, at *5 (N.D. Ill. Dec. 22, 2021) (quoting *Genetic Techs. Ltd. v. Merial LLC*, 818 F.3d 1369, 1376 (Fed. Cir. 2016)).

If the reviewing court concludes at the second step of *Alice* that the patent does not contain an inventive concept sufficient to bring the abstract idea into the realm of patentability, then the invention is deemed ineligible for patent protection.

C. Resolution of Patent Eligibility on a 12(b)(6) Motion

“Determining patent eligibility under § 101 is an issue of law and therefore may properly be addressed in response to a motion to dismiss.” *See Atos, LLC*, 2021 WL 6063963, at *5 (citing *OIP Tech., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015)). The patent eligibility inquiry may sometimes involve underlying disputes of fact, in which case the district court should

not determine eligibility as a matter of law if there are factual allegations which, taken as true, prevent a negative finding on eligibility. *See id.* (citing *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018)). But as the § 101 inquiry is generally directed towards the language of the patent claims themselves, there is often no factual dispute that would preclude a determination of eligibility at the pleading stage. *See Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017) (noting that the Federal Circuit has “repeatedly affirmed § 101 rejections at the motion to dismiss stage, before claim construction or significant discovery has commenced.”) (collecting cases). In sum, the Court can determine patent eligibility as a matter of law on the face of the Complaint and language of the Asserted Patents, keeping in mind the general standards applicable to Rule 12(b)(6) motions, including that, as will be relevant below, the Court need not accept conclusory allegations that merely restate the elements of a cause of action.

Discussion

Aldi has moved to dismiss the Complaint pursuant to Rule 12(b)(6), arguing that the Asserted Patents are ineligible for patent protection because they: (1) are directed to the abstract idea of collecting and displaying geographic information of nearby store locations, (2) involve only conventional computer components and generic computer functions that do not, individually or in combination, make the claims patent-eligible, and (3) recite their methods in purely functional claim language. (Dkt. 11 at 12.) Cascades responds by arguing that it has alleged plausible facts in the Complaint supporting the subject matter eligibility of all the Asserted patents. (See Dkt. 16 at 6.)

As a threshold matter, the Court notes that it need not address eligibility as to every individual patent or claim referenced in the Complaint, but instead may designate a “representative

claim.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1348 (Fed. Cir. 2014). Aldi claims that the asserted claims across all of the Asserted Patents can be evaluated jointly using Claim 1 of the ’395 Patent as a representative claim, because the claims are all “substantially similar and linked to the same abstract idea” as addressed in Claim 1 of the ’395 Patent (Dkt. 11 at 12) (citing *IQS US Inc. v. Calsoft Labs Inc.*, No. 16 CV 7774, 2017 WL 3581162, at *2 (N.D. Ill. Aug. 18, 2017); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2016)). Cascades’ response does not directly address this point, though Cascades generally admits that the Asserted Patents “share a common specification,” and its own briefing points almost entirely to the language of Claim 1 of the ’395 Patent. (See, e.g., Dkt. 16 at 5 n.1.) Further, while the Complaint alleges that Aldi has infringed a number of claims across the patents, Cascades only specifically alleges facts related to Claim 1 of each patent, which it states is “exemplary” of Aldi’s infringement. (Dkt. 1 ¶¶ 20, 32, 45.) In any event, setting aside that Cascades has implicitly conceded the point, the Court has reviewed the claims and agrees with Aldi that all of the claims of the Asserted Patents are substantially similar and can be evaluated jointly based on Claim 1 of the ’395 Patent as a representative claim.⁴

The Court will therefore address the parties’ arguments as to eligibility under the two-step *Alice* framework below using Claim 1 of the ’395 Patent as a representative. Ultimately, the Court concludes that there are no factual allegations that preclude a finding on eligibility, and finds that the Asserted Patents are directed at ineligible abstract subject matter and are not eligible for patent

⁴ As noted above, Claim 1 in each of the Asserted Patents describes the same method by which a device user selects a brand image, the device identifies its location without input by the user, and the device presents the user with a map of the geographic area surrounding the device with an indicator where the selected brand can be purchased. Claim 1 of the ’504 Patent merely adds that the “device” at issue be a “wireless communication device,” and Claim 1 of the ’766 Patent adds that there may be a “second” indicator of a brand access site. As for the other claims that Cascades suggests in passing in the Complaint that Aldi may also be infringing, the Court need not identify them all in detail. It suffices to say that they all relate to the same underlying method described in Claim 1, and to the extent that they may add further limitations to the method described in Claim 1, those limitations do not change the fact that Claim 1 is representative.

protection.

A. *Alice* step one

Turning to the *Alice* test, step one requires the Court to determine whether Claim 1 of the '395 Patent is “directed to one of those patent-ineligible concepts,” specifically whether it is directed to an abstract idea. *See Alice*, 573 U.S. at 217. “The ‘abstract ideas’ category embodies the ‘longstanding rule’ that ‘an idea of itself is not patentable.’” *Id.* (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). The Federal Circuit has acknowledged that “distinguishing between claims that recite a patent-eligible invention and claims that add too little to a patent-ineligible abstract concept can be difficult, as the line separating the two is not always clear.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1255 (Fed. Cir. 2014). Courts must take care not to overgeneralize claims, as ultimately all inventions can be reduced to abstract principles. *See Atos*, 2021 WL 6063963 at *8 (citing *Diamond v. Diehr*, 450 U.S. 175, 189 n.12 (1981)). On the other hand, courts should “endeavor to root out creative ‘drafting effort[s] designed to monopolize [the abstract idea].’” *Va. Innovation Scis. Inc. v. Amazon.com, Inc.*, 227 F. Supp. 3d 582, 592 (E.D. Va. 2017) (quoting *Alice*, 573 U.S. at 221). Thus, at step one courts should consider whether the “character as a whole” of the claims are directed, not merely related, to an abstract idea. *See Enfish LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016).

Aldi argues that Claim 1 of the '395 Patent “boils down to the concept of collecting and displaying geographic information of nearby stores,” which it argues is an abstract idea ineligible for patent protection under the applicable legal authority. (Dkt. 11 at 13–14.) Aldi further maintains that the Asserted Patents do not include any specific asserted improvement in computer capabilities, but instead simply describe a sequence of functional steps that utilize computers and pre-existing technology as tools. (See Dkt. 18 at 9.) Aldi submits that claims such as these that do

not improve on pre-existing computer processes, and which merely recite an end result of what can be done by these preexisting processes, are directed at abstract ideas and thus the first step of *Alice* is satisfied. (Dkt. 11 at 14; Dkt. 18 at 9.)

The Court agrees with Aldi. Over the years, the Federal Circuit has considered the issue of what constitutes an “abstract idea” on a number of occasions, and notably, it “repeatedly has found that claims directed to the automation of the collection, analysis, manipulation, or display of information are directed to an abstract idea.” *Atos*, 2021 WL 6063963, at *9 (*citing Univ. of Fla. Rsch. Found. v. Gen Elec. Co.*, 916 F.3d 1363, 1367 (Fed. Cir. 2019) (collecting cases)); *see also, Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (“information as such is an intangible. Accordingly, we have treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas.”) (citations omitted).

In *Electric Power Group*, for example, the claims of the asserted patent at issue recited a method for collecting data from a variety of sources to present real-time information about events on an interconnected electric power grid. 830 F.3d at 1351–52. The Federal Circuit explained that the “focus” of the claims at issue was merely “collecting information, analyzing it, and displaying certain results of the collection and analysis,” and was therefore directed at an abstract idea. *Id.* at 1353–54. The court noted in particular that the claims did not address or purport to present any improvement in computers, but merely were directed at abstract ideas that used computers as tools. *See id.* at 1354.

Similarly, in *Move, Inc. v. Real Estate Alliance Ltd.*, the claim at issue described a method for “collecting and organizing information about available real estate properties and displaying this information on a digital map that can be manipulated by the user.” *See* 721 F. App'x 950, 953

(Fed. Cir. 2018). The Federal Circuit found that the claim was not “meaningfully distinct” from other claims related to the collection and display of information that the court had previously held were directed at abstract ideas, including *Electric Power Group* in particular. *Id.* at 954–55. The court acknowledged that the idea of collecting and storing information in a database about real estate, and allowing a user to display that data for a particular geographic region on a digital map that could be manipulated, “may well be improvements in the identification of available real estate properties.” *Id.* at 956. But the court went on to note that there was no evidence that that idea was a “technological improvement,” or that the specifications of the claimed invention improved the functioning of a computer itself. *Id.* Instead, as in *Electric Power Group*, the court found the claim in the patent merely described a method for searching for real estate using existing computer technology as a tool. *Id.* In reaching this holding, the court notably rejected the patent-owner’s argument that the ability for users to manipulate the digital maps and zoom in on particular areas represented a technological advancement that distinguished the claim from other cases involving abstract ideas. *Id.* The patent owner argued that the ability to manipulate a computer-displayed map to zoom in and depict a higher level of detail “was neither routine nor conventional.” *Id.* But the court noted that the claim did not focus on the “technical implementation details of the zooming functionality,” but rather merely recited “nothing more than the result of the zoom.” *Id.* at 956. According to the court, such a claim was directed to an abstract idea because it merely recited the end “function”—zooming in—not a particular way of performing that function. *Id.* (citing *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016) (“There is nothing in claim 1 that is directed to how to implement out-of-region broadcasting on a cellular telephone. Rather, the claim is drawn to the idea itself.”)).

Here, like the claims at issue in *Electric Power Group* and *Move, Inc.*, the Court finds that Claim 1 of the '395 Patent, is plainly directed to the abstract idea of the collection, analysis, and display of information. In particular, the claim is directed at the abstract idea of collecting geographic information about the location of a device and nearby stores or businesses offering certain products, and displaying that information to the user. This claim is not meaningfully distinguishable from the claim involving the display of real estate properties in a particular geographic area that was at issue in *Move, Inc.* Indeed, a number of district courts have concluded that similar patents that relate to the collection and display of information regarding particular content on digital maps were targeted at abstract ideas. *See e.g., Peschke Map Techs. LLC v. Rouse Properties Inc.*, 168 F. Supp. 3d 881, 888 (E.D. Va. 2016) (finding that patent describing an electronic map navigation system for shopping centers, in which a user would be presented with a digital map of a shopping mall displaying the location of different stores, was directed at an abstract idea); *Jewel Pathway LLC v. Polar Electro Inc.*, 556 F. Supp. 3d 335, 344 (S.D.N.Y. 2021) (holding that patent describing a process for collecting location data from multiple GPS-enabled devices to generate maps of “traversable paths” was directed at an abstract idea); *Encyclopaedia Britannica, Inc. v. Dickstein Shapiro LLP*, 128 F. Supp. 3d 103, 112 (D.D.C. 2015) (holding that patent’s claims that recited steps for the display of a world map, with place names listed on the map hyperlinked to lists of articles about those places, was directed at an abstract idea), aff’d, 653 F. App’x 764 (D.C. Cir. 2016); *Location Based Servs., LLC v. Niantic, Inc.*, 295 F. Supp. 3d 1031, 1047–48 (N.D. Cal. 2017) (patent directed at displaying a map of locations with information about whether the user may travel across or access those locations was directed at an abstract idea), aff’d, 742 F. App’x 506 (Fed. Cir. 2018). Thus immediately, Claim 1 appears directly comparable to the types of asserted patents that have been consistently deemed abstract ideas at step one of the *Alice*

test, because it relates merely to the collection, analysis, and display of data or information on a map.

Cascades attempts to get around this issue by arguing that Aldi has overgeneralized the claims in the Asserted Patents by describing them as directed at the collection and display of information. Instead, Cascades asserts that the Asserted Patents are directed at improving upon the preexisting mapping functionality of certain electronic devices, such as smart phones. (Dkt. 16 at 12–14.) Cascades notes that, as discussed above, the Asserted Patents purport to improve upon the prior available means for a user to locate businesses selling particular brands; instead of a user having to manually input their location or having to first wait for a map to generate and then specify a business, Claim 1 of the '395 patent describes a process where the user merely selects a brand image and is automatically presented with a map showing locations in the user's geographic area. (*Id.* at 14.) Cascades thus claims that the Asserted Patents provide a specific and tangible solution to a technological problem: allowing users to locate brand access sites with reduced effort than they would expend using device's preexisting mapping functionality. (*See id.* at 13–14.)

The Court is not convinced. Cascades' argument is similar to the patent-holder's argument in *Move, Inc.* discussed above related to the "zoom functionality" of their digital map, an argument that was expressly rejected by the Federal Circuit. While it is true the Asserted Patents purport to improve upon prior mapping functionality, the problem for Cascades is that, as in *Move, Inc.*, none of the claims in the Asserted Patents describe any specific change or improvement on preexisting computer processing power or technology. Indeed, the face of the Asserted Patents admit that computer systems and smart-devices already have the capability to identify a device-user's location using built-in GPS technology, to display digital maps of the surrounding geographic area without input from users, and to search for and collect information about particular businesses to

populate on the map. (See e.g., Dkt. 11-1 at 7; Dkt. 11-2 at 7; Dkt. 11-3 at 7.) The Asserted Patents merely combine these pre-existing computer functionalities to collect and display information in a particular way, that is, to have a user select a brand image and have the device automatically display a map with the user’s location, based on the internal GPS of a device, as well as information about nearby business that sell particular branded products or service. Critically, as in *Move, Inc.*, the Asserted Patents do not describe any “technical implementation details” for how this combination of multiple functions displaying information will be achieved, but instead, Claim 1 “recites nothing more than the result.” See *Move, Inc.*, 721 F. App’x at 956.

In short then, while Cascades claims the patents are directed at improving mapping functionality, they do not actually describe any new technological process, nor detail any changes to existing computer processes, to achieve the desired result of having a map automatically display a user’s location and automatically search for and display business information in the same area. Rather, as with the zoom functionality in *Move, Inc.*, the Asserted Patent merely describes the process in terms of the end result—a map with the user’s location and nearby businesses that sell the selected brand. As the Federal Circuit stated in *Move, Inc.*, such claims that merely use functional language to describe the desired result, without any technological details about how that result is implemented or that improves on existing computer technology, “are drawn to an abstract idea.” *Id.*; see also *Jewel Pathway*, 556 F.Supp.3d at 344 (“Because the ’711 Patent fails to provide any technical details for the tangible components . . . instead predominately describ[ing] the system and methods in purely functional terms, the Court holds that, at *Alice* step one, representative claim 1 is directed to the abstract idea of collecting, analyzing, manipulating, and displaying data.”) (internal quotation marks and citations omitted).⁵

⁵ Cascades attempts to distinguish *Move, Inc.* by noting that the decision was issued at the summary judgment stage after factual development. Cascades maintains that, while there was no evidence of technological advancement

The Court thus concludes that Claim 1 of the '395 Patent, which is representative of all the claims of the Asserted Patents that are at issue, is directed to an abstract idea.

B. *Alice* step two

Having found at step one that the representative Claim 1 of the '395 Patent is targeted at the abstract idea of the collection, analysis, and display of information, the Court turns next to the second step of the *Alice* test: whether the asserted claims contain an “inventive concept sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221. (citing *Mayo*, 566 U.S. at 79). To do so, the Court must “consider the elements of each claim both individually and ‘as an ordered combination.’” *Id.* at 217 (quoting *Mayo*, 566 U.S. at 79). Transforming an otherwise abstract idea into an patent-eligible innovative concept “requires more than simply stating an abstract idea while adding the words ‘apply it.’” *Id* at 221 (quoting *Mayo*, 566 U.S at 72.). Furthermore, if the asserted elements involve ““well-understood, routine, [and] conventional activity previously engaged in by researchers in the field,’ they do not constitute an ‘inventive concept.’” *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018) (citing *Mayo*, 566 U.S. at 73).

Aldi argues that Claim 1 of the '395 Patent fails at step two of the *Alice* test because it is “predicated on generic computer technology and contains no ‘inventive concept’ sufficient to

produced in discovery in *Move, Inc.*, here the Asserted Patents describe, and Cascades has alleged in the complaint, “concrete facts” indicating that the claims are directed at improving a devices mapping functionality. While it is true that *Move, Inc* was decided at the summary judgment phase, the Federal Circuit’s analysis of step-one of the *Alice* test was based almost entirely on the language of the claims themselves, not particular facts that only came to light in discovery. The court’s reasoning is thus still directly applicable and this Court finds it persuasive, despite the different procedural posture. Further, the district court cases cited in this section involving similar patents for computerized maps displaying information, including *Jewel Pathway* and the other cases cited *supra* at page 13, were decided at the initial pleading stage, and thus provide ample persuasive authority that such claims as are at issue here are directed at an abstract idea. And regardless, contrary to Cascades’ argument, it has not in fact alleged “concrete facts” demonstrating that the claims are directed at improving a device’s mapping functionality. Rather, as discussed further in the next section below, Cascades’ allegations are highly generic and conclusory, and do not provide any details explaining how it is the patent improves upon preexisting computer functionality.

confer patent eligibility.” (Dkt. 11 at 16.) Aldi maintains that there is simply nothing inventive about using well-known computer technology to perform the conventional function of collecting and displaying geographic information, and that such claims that “merely require generic computer implementation” cannot transform an otherwise abstract idea into a patent-eligible invention. (*Id.*) (citing *Move, Inc.*, 721 F. App’x at 957.)

In conducting the step two analysis, the Court agrees with Aldi and finds that Claim 1 of the ’395 Patent lacks an inventive concept sufficient to transform the abstract idea into a patentable one. The recited elements of the claim—“displaying, using a device, a first image,” “receiving . . . an indication of a selection by the user,” “identifying a first location of the device,” “identifying a first brand access site,” and “providing to the user . . . a first map image which describes a geographic area . . . which includes a first indication of the first brand access site”—are described in highly generic functional terms, and the Asserted Patents do not include any technical details about how these steps are to be implemented, nor do they include any specifications suggesting that anything other than preexisting and conventional computer technology is required to perform the steps of the described method. Indeed, as noted above, the patents expressly admit that existing computer technology can perform each of the steps independently. (See, e.g., Dkt. 11-1 at 7) (“Various conventional computer-based systems exist for displaying maps to users.”). It is well established that reliance on off-the-shelf, conventional computer technology to gather and present information does not transform a patent-ineligible abstract idea into an otherwise patent eligible inventive concept. *See Elec. Power Grp.*, 830 F.3d at 1355 (concluding the patent was ineligible for protection at step two of *Alice* test); *Move, Inc.*, 721 F. App’x at 957 (concluding the patent was ineligible at step two of *Alice* because the patent indicated the invention could be performed using generic computer systems, and “the failure to provide any implementation details for the

zoom feature suggests that the zoom feature utilizes only existing computer capabilities.”); *see also Peschke*, 168 F. Supp. 3d at 889 (noting that claims that “do nothing more than describe an abstract idea with the instruction to ‘apply it’ on a computer” are not eligible for patent protection). Here then, the claims in the Asserted Patents do not constitute an inventive concept sufficient for patent protection, because they merely rely on generic and pre-existing computer technology to perform the abstract idea of collecting and displaying information about a device location and nearby businesses selling a particular branded service.

The case of *Peschke Map Technologies* from the Eastern District of Virginia is instructive here. *Peschke* involved an asserted patent for a computerized system for displaying maps of shopping centers; a user would be presented with a digital map of a shopping mall with the location and shape of all the different stores, and each store on the map functioned as a link which, when clicked on, took the user to a description page for that store. 168 F. Supp. 3d at 883. The patent also indicated the map might contain several layers permitting users to zoom in and out to larger geographic areas. *Id.* The defendant moved to dismiss on the grounds that the asserted patent was not patentable under the *Alice* test. *Id.* At step one of *Alice*, the district court concluded that the patent was directed at an abstract idea, because maps displaying the location and identity of structures in a geographic area, with information about those structures, had long existed, and the idea of simply using a computer with hyperlinks to accomplish this same process was an unpatentable abstract idea. *Id.* at 887–88 (comparing the asserted patent to city maps or atlases, and concluding that the patent “simply [tacks] a long-standing practice to a general purpose computer. As the case law indicates, such an invention is an unpatentable abstract idea.”). At step two of *Alice*, the patent-holder argued that the patent was nevertheless an “inventive concept” qualifying for patent protection, because it constituted an “improvement of computerized mapping

though the use of layers and linking,” specifically through the use of hyperlinks to description pages about stores overlaid over the image of the store on the map. *Id.* at 890. The patent-holder maintained that this process of overlaying hyperlinks on a map was not commonplace at the time computer mapping systems were invented, and therefore the patent’s use of the process was inventive. *Id.*

The court in *Peschke* rejected the patent-holder’s arguments, however, finding that the claimed “inventive concept” of overlaying hyperlinks on top of a map was “simply the computerization of the well-known practice . . . of using a map that depicts the shapes of stores as seen from above to provide the map user with information about those different stores.” *Id.* The court pointed out that, not only have maps and atlases with details about buildings in a particular area existed for hundreds of years, but “electronic maps, hyperlinks, and the use of servers and databases to provide information” were all widely used and well understood. *Id.* The court thus concluded that the asserted patents “merely describe[d] the use of these widely-used and well-understood tools to implement the abstract idea on a computer,” and the application of an abstract idea to well-understood computer functions does not make a system patent eligible. *Id.*

This Court finds the reasoning in *Peschke* persuasive and directly applicable to the case at hand. Maps of certain geographic areas with details about the businesses in that area have long existed, and the Asserted Patents here merely reflect the computerization of the well-known practice of using a map or atlas to find information about businesses in a particular area. Further, the Asserted Patents themselves concede that electronic maps have long existed with the capability to display a user’s location using GPS, and to search for and display information about particular businesses in certain area. As in *Peschke* then, the Asserted Patents here merely describe the use of widely-used and well-understood tools to implement an abstract idea—the display of a user’s

location and nearby businesses selling particular brands—using a computer or similar electronic device. Such an application of an abstract idea to previously existing and well-understood computer functions does not constitute an inventive concept eligible for patent protection. *See Peschke*, 168 F. Supp. 3d at 890.

Nonetheless, Cascades claims that its combination of automatically determining a device location and mapping nearby brand locations transforms the otherwise abstract idea here into an inventive concept eligible for patent protection. Cascades notes that it specifically alleges that this process was not “well-understood, routine or conventional at the time of the invention,” and that this combination “went against trends in mapping technology at the time.” (Dkt. 16 at 16–17.) Cascades further contends that the combination of different aspects of existing mapping functionality is inventive because it “advantageously enable[s] a user to . . . see where products or services of a brand . . . may be available for purchase, with minimal effort” (*Id.* at 17.) Finally, Cascades claims that the “mapping hardware and software that combined automatically determining device location and mapping nearby brand locations” did not exist at the time of the Asserted Patents. (*Id.*)

There are several issues with Cascades’ arguments. As a general matter, Cascades cannot defeat dismissal by relying on generic or conclusory allegations that its Asserted Patents addressed issues that were not “well-understood, routine, or conventional” or were targeted at solving a specific technical problem. *Cisco Sys., Inc. v. Uniloc 2017 LLC*, 813 F. App’x 495, 498–99 (Fed. Cir. 2020) (affirming district court’s conclusion that generic allegations that a patent and claims were “drawn to solving a specific, technical problem” or that “the inventions . . . were not well-understood, routine or conventional at the time of the invention” were not proper factual allegations, but sweeping conclusory statements that did not preclude dismissal). Neither the

Complaint nor the Asserted Patents contain any facts or language actually suggesting that the claims require anything other than preexisting, well-understood, and conventional computer technology to perform the method. Quite the contrary, the Asserted Patents describe the purported invention in terms that expressly rely on the use pre-existing technology: for example, they refer to the use of preexisting electronic devices such as mobile phones and computers, and rely heavily on the pre-existing geolocation capabilities that already exist in those devices, for example through using a device's internal GPS capabilities. (*See, e.g.*, Dkt. 11-1 at 7–8.). While at this stage the Court must accept all well-pled allegations as true and draw all reasonable inferences in Cascades' favor, the Court need not accept conclusory allegations that merely restate the elements of the cause of action. *See, e.g.*, *Dix*, 978 F.3d at 513. The Court therefore need not credit Cascades' generic allegations that the Asserted Patents describe a process that was not well understood or conventional in the absence of any allegations or statements in the Asserted Patents themselves that support that inference. This is particularly the case when the Asserted Patents directly suggest the opposite, by recognizing that generic and pre-existing computer functionality can perform all the required steps, and simply cite vaguely to computers and electronic devices as performing the required steps of the claimed invention.

Cascades also cannot avoid dismissal through its conclusory assertion that Dr. Gold was the first to envision this particular combination of multiple pre-existing technologies for mapping. Accepting it as true that Dr. Gold was the first to envision this combination of the processes of automatically determining a user's location through GPS, and automatically searching for business locations, the combination of different functions that were themselves each well-understood and long-available does not transform an abstract idea into an inventive concept. *See Checksum Ventures, LLC v. Dell Inc.*, 412 F. Supp. 3d 906, 918 (N.D. Ill. 2019) (“the combination of the

elements in these claims is far from inventive: Computers have long been able to both calculate and store data. Combining those two functions does not an invention make”); *Peoplechart Corp. v. Wintrust Bank, N.A.*, 543 F. Supp. 3d 594, 603 (N.D. Ill. 2021) (holding that a patent that merely described a “series of transactions and steps . . . involving a particular combination of existing hardware and software” was not an inventive concept) (cleaned up) (citations omitted).

Here, Cascades does not dispute, and in fact the Asserted Patents acknowledge, that computers have long been able to automatically detect the location of a device without input from a user through the use of GPS technology. Additionally, computers have also long been able to automatically search for and display the location of businesses based on an input provided by the user. The fact that the Asserted Patents combine these separate, long-standing and well-understood concepts into a single process using existing generic computer functions does not constitute an inventive concept. This is the case even if that combination does carry the purported benefit of reducing the effort involved to search for businesses, because the benefit in reduced effort comes from the capabilities of the underlying and pre-existing computer functions, not from the patented method itself. *See, e.g., FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016) (“While the claimed system and method certainly purport to accelerate the process of analyzing audit log data, the speed increase comes from the capabilities of a general-purpose computer, rather than the patented method itself.”). In other words, because preexisting generic computer processing can already perform the tasks in combination, the benefit comes from the underlying computer technology itself, not from the asserted method of combining them. In short, the combination does not constitute an inventive concept because the focus of the claims is not “an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.” *See id.* (citing *Elec. Power*, 830 F.3d at 1354.)

Finally, the Court finds that none of the additional limitations or specifications in the dependent claims render the '395 Patent inventive and eligible for patent protection. Cascades notably does not advance any argument with respect to any of the dependent claims, simply contending in conclusory fashion that the Court need not address the dependent claims if it finds Claim 1 is independently patent eligible. Cascades has thus waived any argument on this point. But in any event, the Court has reviewed the dependent claims and finds that none transform Claim 1 of the '395 Patent into an inventive concept. The dependent claims suffer from the same issues as Claim 1: they recite generic functional language about desired results that plainly relies on existing generic computer functionality. For example, many of the dependent claims are simply directed at describing the types of brand access sites that might appear on the map with different levels of specificity, i.e., "a parcel of real property" or "geographic location," to the more specific "retail store" or "movie theater." (Dkt. 11-1 at 15.) Others describe further functions that the user might be able to perform after selecting a particular brand access site on the map, such as causing the device to dial the site's telephone number, to direct to their website, or to produce driving directions. (*Id.*) But the problem is that none of these dependent claims describe the technical details for how they will be implemented. Again, the Asserted Patents simply rely on the pre-existing functionality of the devices at issue. The dependent claims thus suffer from the same deficiency discussed above at length in that they merely invoke computers as a tool, and therefore do not render the claim patent eligible.

In sum, the Court concludes that Claim 1 of the '395 Patent, as representative of the other claims at suit, is ineligible for patent protection under the *Alice* test as a matter of law.

C. Dismissal with Prejudice

Based on the Court’s finding that the Asserted Patents are ineligible for patent protection, the Court concludes that Cascades has accordingly failed to state a claim for patent infringement, and its Complaint must therefore be dismissed. The only question that remains is whether the Court should grant leave for Cascades to amend the complaint to attempt to add additional allegations demonstrating patentability. Cascades expressly requests the Court grant such leave in the event Aldi’s motion to dismiss is granted.

Rule 15 governs the amendment of pleadings, and generally provides that leave to amend should be freely given when justice so requires. Fed. R. Civ. P 15(a)(2). The decision whether to grant a plaintiff leave to amend is within the sound discretion of the Court. *See, e.g., Pugh v. Trib. Co.*, 521 F.3d 686, 698 (7th Cir. 2008). The Court has authority to deny leave to amend where amendment of the complaint would be futile. *See id.; see also Peoplechart Corp.*, 543 F. Supp. 3d at 604. Here, because the Court concludes that the Asserted Patents are directed to ineligible subject matter as a matter of law, the Court finds that any amendment would not cure the eligibility issue and would therefore be futile. Put another way, the Court finds there are no allegations that Cascades could add to remedy the ineligibility problem outlined in this opinion, because the Asserted Patents are ineligible on the face of the language in the patents themselves, which demonstrate as a matter of law that the patents are directed at an abstract idea and fail under the *Alice* test. Leave to amend is therefore inappropriate, and the case will be dismissed with prejudice. *See Peoplechart Corp.*, 543 F. Supp. 3d at 604.⁶

⁶ Cascades argues in a footnote that the Court should alternatively defer ruling on the issue of eligibility until after a formal claim construction hearing. Even if this argument were properly presented—and burying arguments in footnotes is rarely proper—the Court finds that claim construction is unnecessary here. While Cascades claims that the parties’ respective positions “demonstrates a wide gap” in the parties’ understanding of the claimed subject matter, Cascades notably does not point to any particular language in Claim 1 of the ’395 Patent wherein the parties have differing views of the meaning of terms, nor does Cascades propose its own construction for any of the purportedly disputed terms. The Court need not defer resolution of the motion to dismiss and conduct a claim construction hearing

Conclusion

For the forgoing reasons, Defendant Aldi's motion to dismiss is granted. The Complaint is dismissed with prejudice.

ENTERED: 3/31/24



Nancy L. Maldonado

United States District Court Judge

based solely on Cascades' vague allusion to the existence of disputed terms. Rather if there was a dispute that required resolution, it was incumbent on Cascades to point to *particular language* that required construction. Even then, the Court would not have been required to defer resolution of the motion to dismiss, and could resolve the issue without claim construction simply by construing disputed terms in Cascades' favor. Ultimately then, Cascades' cursory attempt to avoid dismissal by requesting claim construction is unavailing, and the Court may reach the issue of eligibility at the pleading stage based on the arguments and record before it.